

REMARKS

A. Request for Reconsideration

Applicants have carefully considered the matters raised by the Examiner in the outstanding Office Action but remain of the opinion that patentable subject matter is present. Applicants respectfully request reconsideration of the Examiner's position based on the above amendments to the claims and the following comments.

B. The Invention

The present invention is directed to a process for making a cellulose ester film.

One of the novel aspects of the invention is that the peeled web is transported through a transport device from the peel position to a tension changing device nearest to the peel position at a tension of 10 to 80 N/m. Another novel aspect of the invention is that the cellulose ester dope is provided by a method involving a first heating step in a tightly sealed pressure resistant vessel, an unsealing step, a resealing step and a second heating step. These aspects are neither taught nor suggested in the prior art.

C. Claims Status

Claims 17-25 are presented for further prosecution, claims 15-16 and 26-27 have been cancelled herein.

D. Prior Art Rejection

The Examiner has made the following two rejections

(1) Claims 15-21 unpatentable over Michihata (EP 1 033 592); and

(2) Claims 22-25 unpatentable over a combination of Michihata, Knoop (US 4,664,859) and Roerty (US 5,862,946).

Turning to prior art rejection (1), the Examiner had cited Michihata in a previous Office Action dated June 22, 2007 to teach a tension of less than 250 N/m. The Examiner took the position that although Michihata didn't teach specifically the critical range claimed in the present application, one of skill in the art would use a range within Michihata's to fine tune the process. Applicants responded to this point made by the Examiner on September 24, 2007, by submitting tests that demonstrated that a transport tension of 10 to 80 N/m results in a cellulose ester film surprisingly superior to a cellulose ester film prepared at a tension falling within the preferred range of Michihata. These tests were reported by way of a Declaration by Mr. Kazama, submitted on September 24, 2007.

On page 6, in the present Office Action, the Examiner stated that although Michihata shows a broad range of 0-250 N/m peeling tension, by his example using 150 N/m peeling tension, he clearly suggests that using values less than his broad upper limit of 250 N/m is known in the art. Applicants submit that Michihata does not teach the criticality of the claimed tension of 10 to 80 N/m of the present invention.

The Examiner's attention is directed to page 5 and Table II of the Declaration of September 24, 2007. Specifically, Mr. Kazama states that the test data provided in the Declaration demonstrated that "inventive samples 8, 9 and 17 greatly minimize elongation and minimize scratches as compared to comparative samples 22 and 23. . . . The results are unexpected to one of ordinary skill in the art, and therefore, it would not have been obvious to one of ordinary skill in the art to arrive at the subject matter of claim 17 over Michihata et al. (EP 1 033 592)."

Specifically, Sample 23, which was prepared at a tension of 110 N/m (above the upper limit of the claimed range), demonstrated inferior results as to elongation percentage as compared to Sample 9, which was prepared at a tension of 80 N/m (within the upper limit of the claimed range). Specifically, the tension of Sample 23 caused

increased elongation percentage of not less than 6.1%, as compared to Sample 9, which exhibited an elongation percentage of 0.1 to 0.5 % elongation. Thus, Sample 23 exhibited more than a ten-fold increase in elongation as compared to Sample 9. Thus, Table II demonstrates the criticality of the upper limit of the claimed range.

Additionally, Sample 22, which was prepared at a tension of 5 N/m (below the lower limit of the claimed range), demonstrated inferior results as to scratches as compared to Sample 17, which was prepared at a tension of 20 N/m (just within the lower limit of the claimed range). In fact, Sample 22 actually produced regular occurring scratches with lengths of about 0.5 mm as compared to Sample 17, which produced no scratches. Thus, the test data provided in the Table demonstrates the criticality of the lower limit of the claimed range.

Furthermore, Sample 8, which was prepared at a tension of 50 N/m (within the claimed range), exhibited no elongation percentage and no scratches. Thus, Sample 8, as compared to Comparative Samples 22 and 23, further demonstrates that a tension within the claimed range exhibits superior results as to elongation percentage and scratches. Thus, Table II of the Declaration of September 24, 2007 demonstrates the criticality of having tension of

10 to 80 N/m.

Moreover, Michihata teaches at paragraph [0100], that "[during] peeling, peeling tension is preferably not more than 250 N/m, and more preferably, 200 N/m, and the conveyance tension is preferably 100 to 300 N/m, and more preferably 130 to 200 N/m" (emphasis added). Michihata teaches in paragraph [0100] that the peeling tension is different from the conveyance tension. The conveyance tension of Michihata is preferably 100 to 300 N/m, and more preferably 130 to 200 N/m. In contrast, claim 17 of the present application provides that the peeled web (after peeling) is transported (conveyed) at a tension of 10 to 80 N/m. Thus, Michihata teaches away from the transport tension of claim 17. Applicants submit that one of ordinary skill in the art, who read Michihata teaching a conveyance tension of preferably 100 to 300 N/m, would not have been motivated to use a conveyance tension of 10 to 80 N/m as claimed.

Applicants respectfully submit that Michihata does not teach or suggest the process for making a cellulose ester film of claim 17, and therefore does not render obvious claims 15-21.

With respect to prior art rejection (2), Claims 22-25 were rejected based on a combination of Michihata, Knoop

and Roerty. However, applicants submit that the combination of Michihata, Knoop and Roerty do not teach as claimed in claim 22: a first heating step, an unsealing step, a resealing step and a second heating step.

Knoop had been cited to teach an unsealing step. At column 7, lines 34-37, Knoop teaches a degassing step, and then pumping the mixture to a holding tank and then to a casting tank. At this point the mixture is ready to be spread onto the casting surface (col. 7, lines 50-55). Thus, Knoop does not teach a resealing step after an unsealing step. Furthermore, applicants submit that Knoop actually teaches away from a resealing step and a second heating step because he teaches that the degassed mixture is ready to be spread onto a casting surface.

Roerty had been cited to teach a second heating step. The passage cited by the Examiner, Column 4, lines 55-60, actually teach that a gas phase is more readily dissolved in a liquid phase when under pressure. There is no teaching in the passage of a second heating step, or a resealing step prior to the second heating step. At page 5 of the Office Action, the Examiner states that it would have been obvious that a second heating step to above boiling point would create the necessary pressure. However, there is no teaching in Roerty of even a first

heating step to around boiling point to suggest a second heating step to above boiling point. Furthermore, the only temperature disclosed in Roerty is room temperature. Thus, one of skill in the art would not look to Roerty to teach a second heating step to above boiling point. Moreover, there is no disclosure of a resealing step between heating steps anywhere in Roerty. Applicants submit that Roerty does not teach a step of resealing the vessel after a first heating step and then further heating the mixture to above the boiling point of the solvent.


In view of the foregoing, it is respectfully submitted that Claims 21-25 are patentable over either of the cited references taken alone or in combination.

E. Conclusion

In view of the foregoing, it is respectfully submitted that the Application is in condition for allowance and such action is respectfully requested. Should any fees or extensions of time or fees be necessary in order to maintain this application in pending condition, appropriate requests are hereby made and authorization is given to debit account #02-2275.

Respectfully submitted,
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